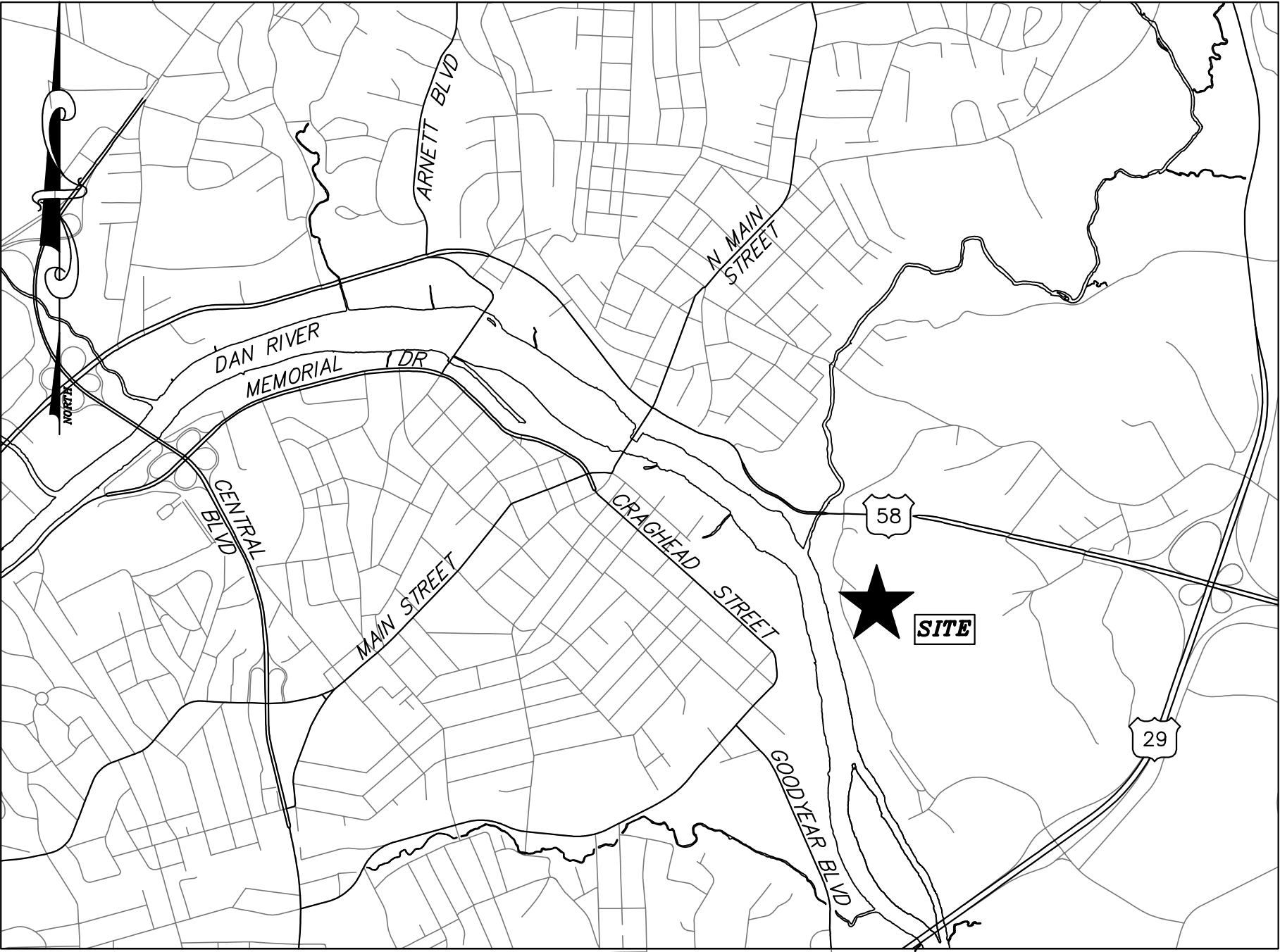


MASS TRANSIT SITE UTILITIES

City of Danville, Virginia AUGUST 2016

VICINITY MAP

SCALE: 1"=2000'



EROSION & SEDIMENT CONTROL NOTES

- ES-1: Unless otherwise indicated, all vegetative and structural erosion and sediment practices will be constructed and maintained in accordance to the minimum standards and specifications of the latest edition of the *Virginia Erosion and Sediment Control Handbook* and Virginia Regulations VR 625-02-00 Erosion and Sediment Control Regulations.
- ES-2: The plan approving authority must be notified one week prior to the preconstruction conference, one week prior to the commencement of the land disturbing activity, and one week prior to the final inspection.
- ES-3: All erosion and sediment control measures are to be placed prior to or as the first step in clearing.
- ES-4: A copy of the approved erosion and sediment control plan shall be maintained on the site at all times.
- ES-5: Prior to commencing land disturbing activities in areas other than indicated on these plans (including but not limited to, offsite borrow and waste areas), the contractor shall submit a supplementary erosion control plan to the owner for review and approval by the plan approving authority.
- ES-6: The contractor is responsible for installation of any additional erosion control measures necessary to prevent erosion and sedimentation as determined by the plan approving authority.
- ES-7: All disturbed areas are to drain to approved sediment control measures at all times during land disturbing activities and during site development until final stabilization is achieved.
- ES-8: During dewatering operations, water will be pumped into an approved filtering device.
- ES-9: The contractor shall inspect all erosion and sediment control measures periodically and after each runoff-producing rainfall event. Any necessary repairs or cleanup to maintain the effectiveness of the erosion controls devices shall be made immediately.
- ES-10: All waste materials, construction debris, and trash will be collected and either removed from the site and disposed of properly or the collected material will be stored in a securely lidded container. If a lidded container is used, it will be emptied as necessary and its contents disposed of properly. No construction materials will be buried onsite. A licensed sanitary waste management contractor will collect all sanitary waste from portable units. Good housekeeping and spill control practices shall be followed during construction to minimize storm water contamination from petroleum products, fertilizers, paints, asphalt, and concrete. A list and the location of required best management practices that are to be used to minimize storm water contamination may be required. Material storage and waste disposal shall be in compliance with federal, state, and local laws and regulations.
- ES-11: Any high-risk chemicals that are to be onsite shall be properly stored and disposed of in accordance with federal, state, and local laws and regulations.
- ES-12: A spill prevention control plan is required for any identified hazardous materials that are to be stored onsite. All spills will be cleaned up immediately when discovered. Spills large enough to reach a storm drainage system or waterways will be immediately reported to the Danville Fire Department Hazardous Materials Response Team (434-799-5226) and the Danville Public Works Department (434-799-5245). Remember, if there is an emergency, dial 911.



GENERAL NOTES

1. THE LOCATION OF UNDERGROUND UTILITIES IS APPROXIMATE.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SATISFY HIMSELF AS TO ALL CONDITIONS OF THE WORK BEFORE BIDDING. NO REPRESENTATIONS ARE MADE AS TO SUBSURFACE CONDITIONS.
3. PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION, THE CONTRACTOR SHALL NOTIFY MISS UTILITY (1-800-552-7001) AT LEAST 48 HOURS IN ADVANCE.
4. THE CONTRACTOR SHALL PROVIDE ALL TRAFFIC CONTROL IN ACCORDANCE WITH THE 2011 "VIRGINIA WORK AREA PROTECTION MANUAL," INCLUDING FLAGMEN WHERE NEEDED.
5. THE LIMITS OF CONSTRUCTION ARE THE STREET RIGHT OF WAY OR THE OBTAINED EASEMENTS AS SHOWN ON THE PLANS.
6. EXISTING SURFACES DISTURBED BY THE CONTRACTOR'S WORK SHALL BE RESTORED TO ITS PRESENT CONDITION. SAFE ACCESSIBILITY TO ALL PROPERTIES AND MAILBOXES SHALL BE MAINTAINED AT ALL TIMES BY THE CONTRACTOR.
7. ANY PROPERTY IRON DISTURBED BY THE CONTRACTOR'S WORK SHALL BE RESET BY A REGISTERED SURVEYOR WITH THE ENGINEER HAVING KNOWLEDGE OF THE WORK.
8. CONTRACTOR SHALL ARRANGE FOR UTILITY POLE RELOCATION OR SUPPORT AND UNDERGROUND UTILITY RELOCATION AS HIS SCHEDULE REQUIRES.
9. EXISTING WATER AND GAS LATERALS MAY OR MAY NOT BE SHOWN; HOWEVER, THE CONTRACTOR IS REQUIRED TO MAINTAIN SERVICES.
10. ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.
11. ALL WORK SHALL CONFORM TO VDOT'S 2007 ROAD AND BRIDGE SPECIFICATIONS AND 2008 ROAD AND BRIDGE STANDARDS.

LEGEND

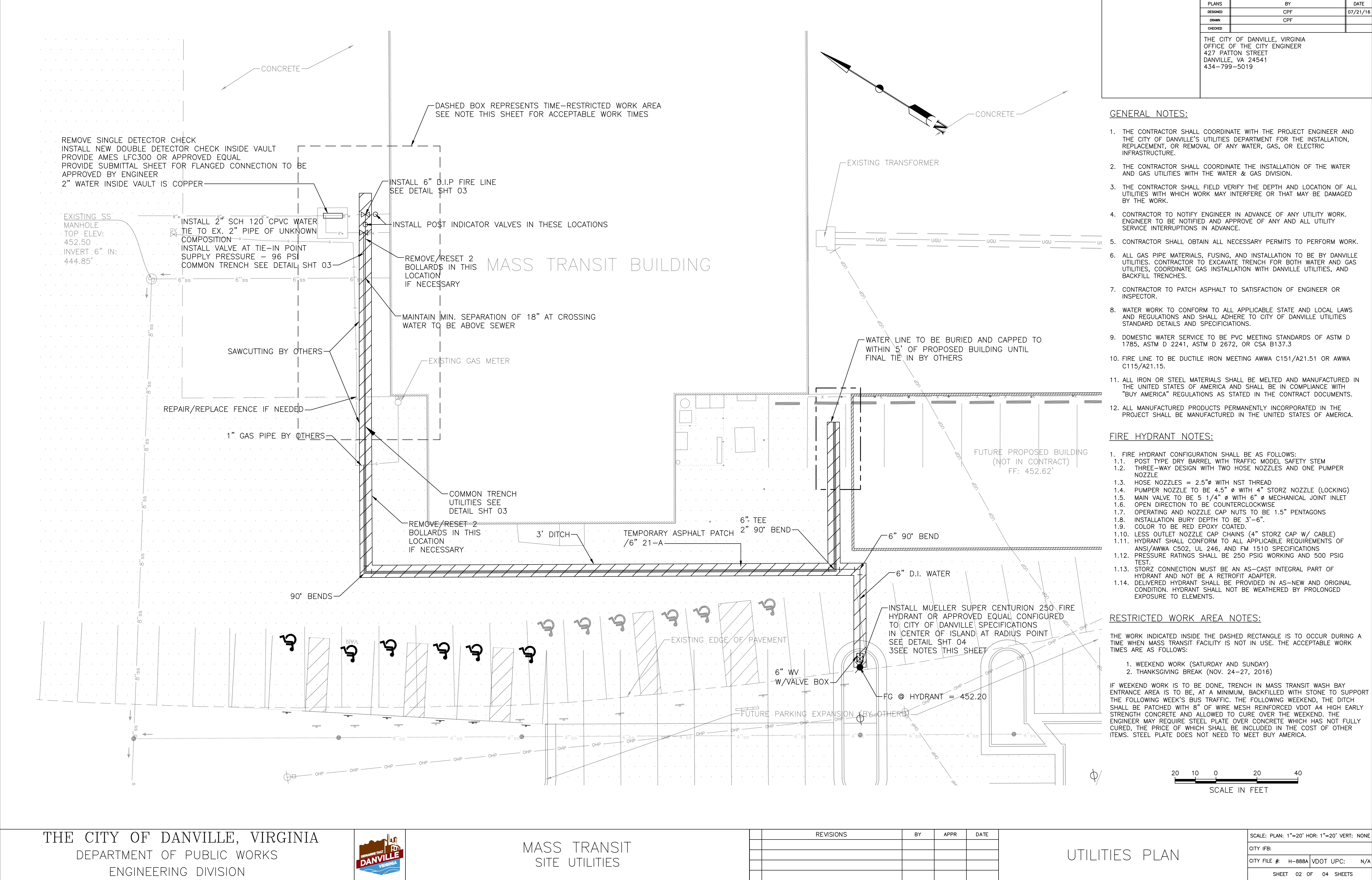
	EXIST. POLE		PROP. SANITARY SEWER
	EXIST. WATER MAIN		PROP. SANITARY MH
	EXIST. WATER VALVE		UNDERGROUND UTILITY
	EXIST. WATER METER		OVERHEAD POWER
	EXIST. GAS MAIN		WATER LINE
	EXIST. GAS VALVE		GAS LINE
	EXIST. SANITARY MH		FENCE LINE
	EXISTING STORM SEWER		
	EXISTING STORM DI		
	EXISTING SIGN		

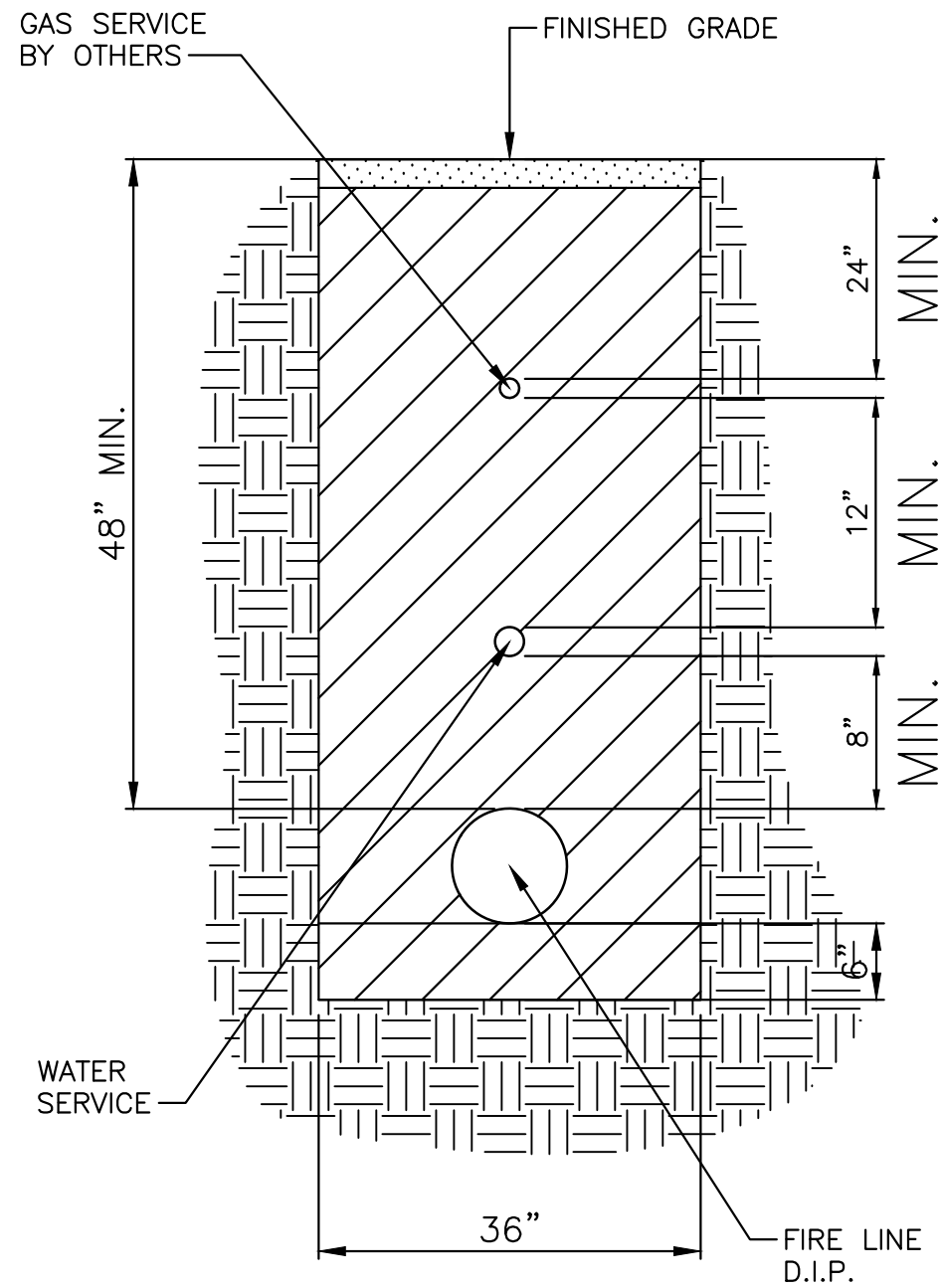
EROSION & SEDIMENT MINIMUM STANDARDS

1. Permanent or temporary soil stabilization shall be applied to denuded areas within seven days after final grade is reached on any portion of the site. Temporary soil stabilization shall be applied within seven days to denuded areas that may not be at final grade but will remain dormant longer than 30 days. Permanent stabilization shall be applied to areas that are to be left dormant for more than one year.
2. During construction of the project, soil stockpiles and borrow areas shall be stabilized or protected with sediment trapping measures. The applicant is responsible for the temporary protection and permanent stabilization of all soil stockpiles on site as well as borrows areas and soil intentionally transported from the project site.
3. A permanent vegetative cover shall be established on denuded areas not otherwise permanently stabilized. Permanent vegetation shall not be considered established until a ground cover is achieved that, is uniform, mature enough to survive and will inhibit erosion.
4. Sediment basins and traps, perimeter dikes, sediment barriers and other measures intended to trap sediment shall be constructed as a first step in any land-disturbing activity and shall be made functional before upslope land disturbance takes place.
5. Stabilization measures shall be applied to earthen structures such as dams, dikes, and diversions immediately after installation.
6. Sediment traps and sediment basins shall be designed and constructed based upon the total drainage area to be served by the trap or basin.
 - a. The minimum storage capacity of a sediment trap shall be 134 cubic yards per acre of drainage area and the trap shall only control drainage areas less than three acres.
 - b. Surface runoff from disturbed areas that is comprised of areas greater than or equal to three acres shall be controlled by a sediment basin. The minimum storage capacity of a sediment basin shall be 134 cubic yards per acre of drainage area. The outfall system shall, at a minimum, maintain the structural integrity of the basin during a twenty-five year storm of 24-hour duration. Runoff coefficients used in runoff calculations shall correspond to a bare earth condition or those conditions expected to exist while the sediment basin is utilized.
7. Cut and fill slopes shall be designed and constructed in a manner that will minimize erosion. Slopes that are found to be eroding excessively within one year of permanent stabilization shall be provided with additional slope stabilization measures until the problem is corrected.
8. Concentrated runoff shall not flow down cut or fill slopes unless contained within an adequate temporary or permanent channel, flume, or slope drain structure.
9. Whenever water seeps from a slope face, adequate drainage or other protection shall be provided.
10. All storm sewer inlets that are made operational during construction shall be protected so that sediment-laden water cannot enter the conveyance system without first being filtered or otherwise treated to remove sediment.
11. Before newly constructed stormwater conveyance channels or pipes are made operational, adequate outlet protection and any required temporary or permanent channel lining shall be installed in both the conveyance channel and receiving channel.
12. When work in a live watercourse is performed, precautions shall be taken to minimize encroachment, control sediment transport and stabilize the work area to the greatest extent possible during construction. Nonerodible material shall be used for the construction of causeways and cofferdams. Earthen fill may be used for these if armored by nonerodible cover materials.
13. When a live watercourse must be crossed by construction vehicles more than twice in any six month period, a temporary vehicular stream crossing constructed of nonerodible material shall be provided.
14. All applicable federal, state and local regulations pertaining to working in or crossing live watercourses shall be met.
15. The bed and banks of a watercourse shall be stabilized immediately after work in the watercourse is completed.
16. Underground utility lines shall be installed in accordance with the following standards in addition to other applicable criteria:
 - a. No more than 500 linear feet of trench may be opened at one time.
 - b. Excavated material shall be placed on the uphill side of trenches.
 - c. Effluent from dewatering operations shall be filtered or passed through an approved sediment trapping device, or both, and discharged in a manner that does not adversely affect flowing streams or offsite properties.
 - d. Material used for backfilling trenches shall be properly compacted in order to minimize erosion and promote stabilization.
 - e. Restabilization shall be accomplished in accordance with these regulations.
 - f. Applicable safety regulations shall be complied with.
17. Where construction vehicle access routes intersect paved or public roads, provisions shall be made to minimize the transport of sediment by vehicular tracking onto the paved surface. Where sediment is transported onto a paved or public road surface, the road surface shall be cleaned thoroughly at the end of each day. Sediment shall be removed from the roads by shoveling, or sweeping and transported to a sediment control disposal area. Street washing shall be allowed only after sediment is removed in this manner. This provision shall apply to individual development lots as well as to larger land-disturbing activities.
18. All temporary erosion and sediment control measures shall be removed within 30 days after final stabilization or after the temporary measures are no longer needed, unless otherwise authorized by the local program authority. Trapped sediment and the disturbed soil areas resulting from the disposition of temporary measures shall be permanently stabilized to prevent further erosion and sedimentation.
19. Properties and waterways downstream from the development sites shall be protected from sediment deposition, erosion and damage.

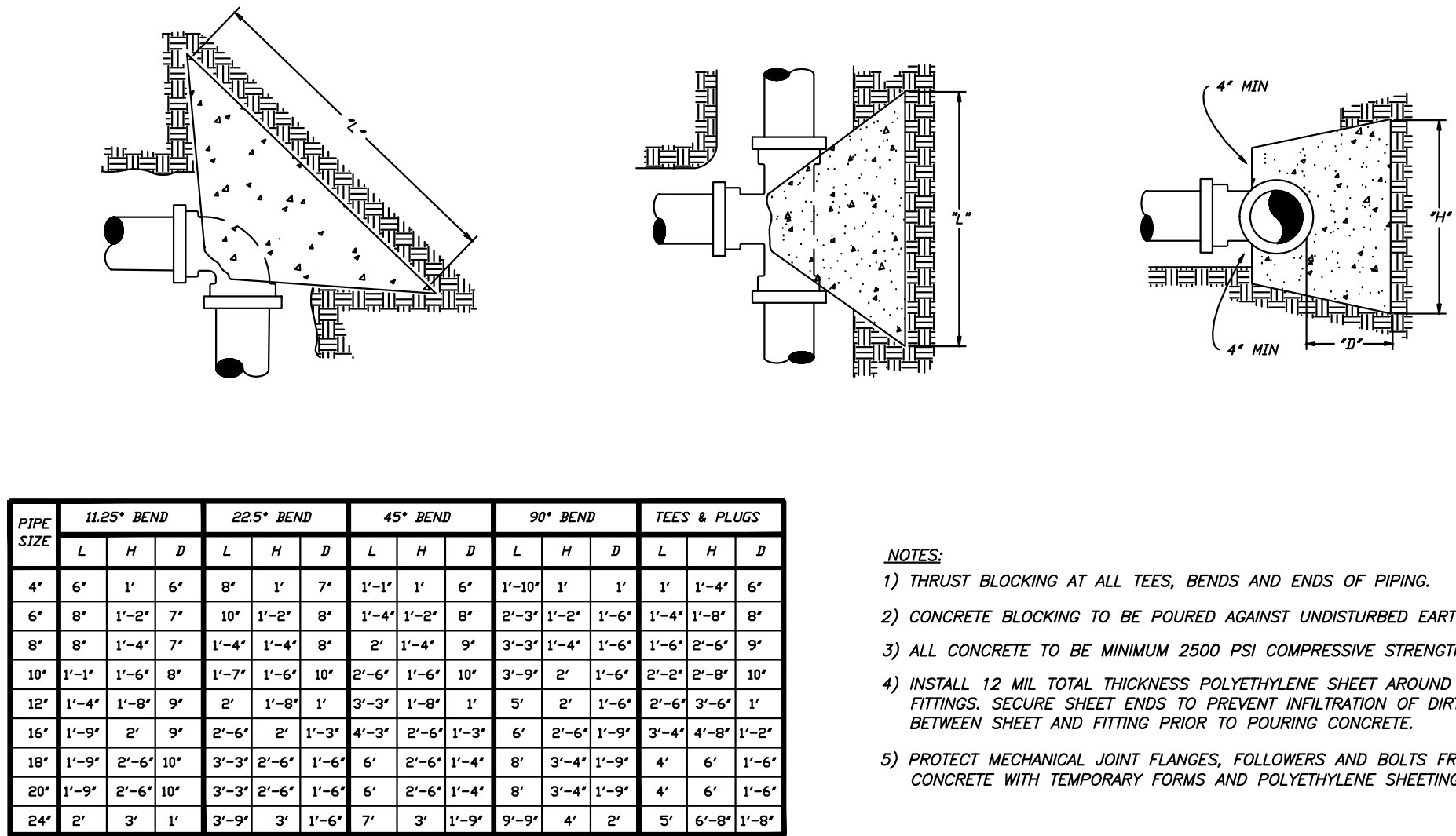
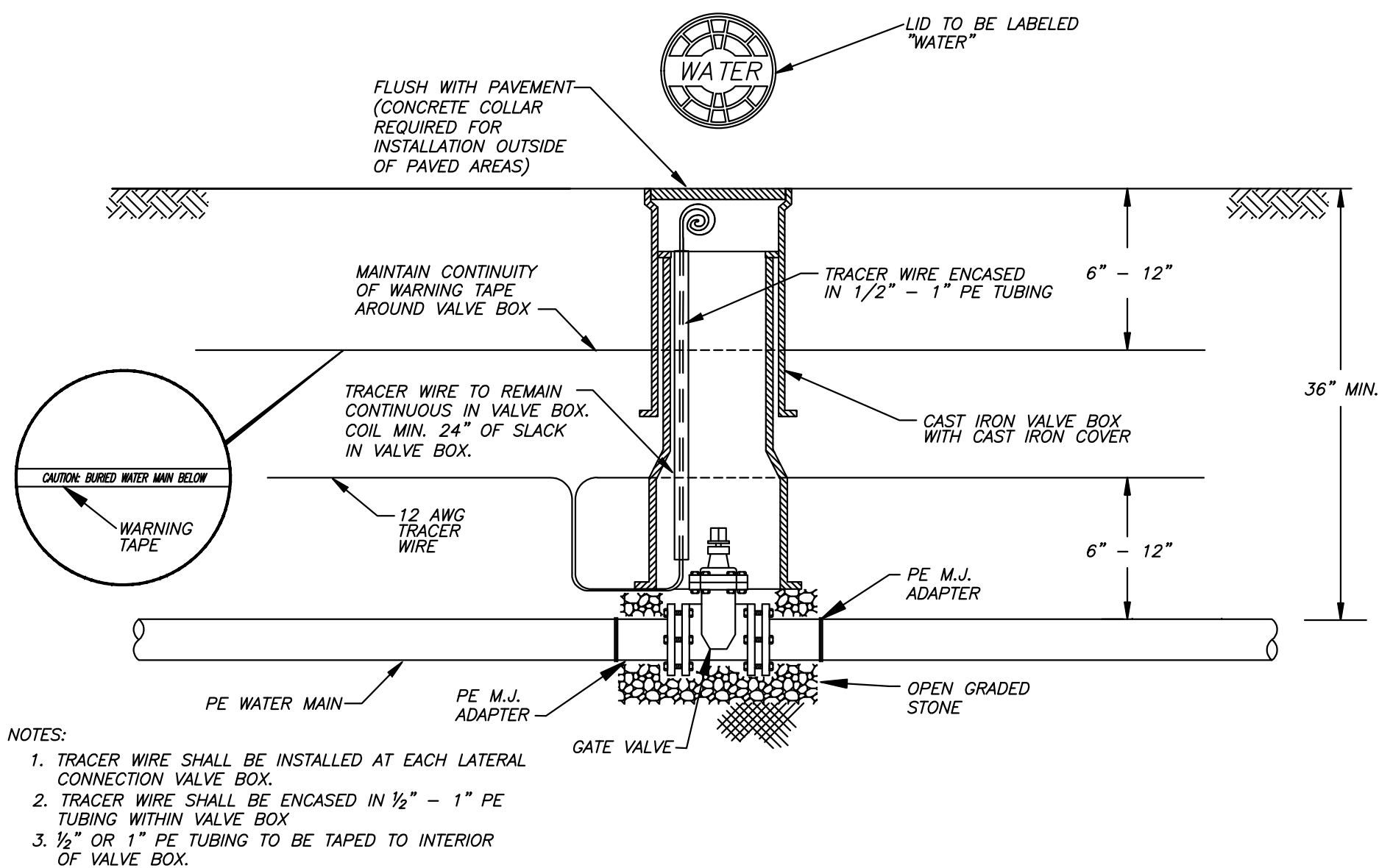
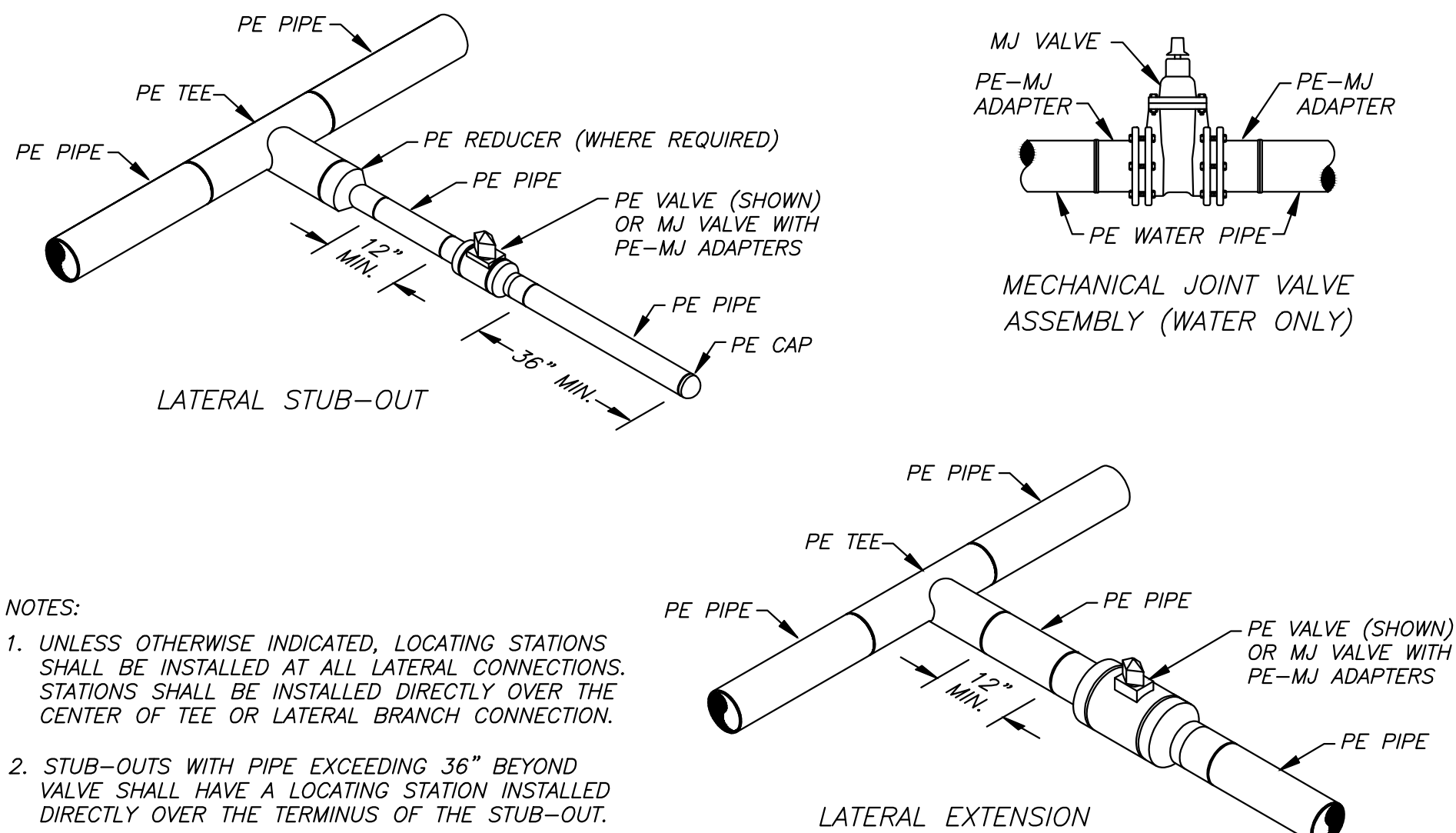
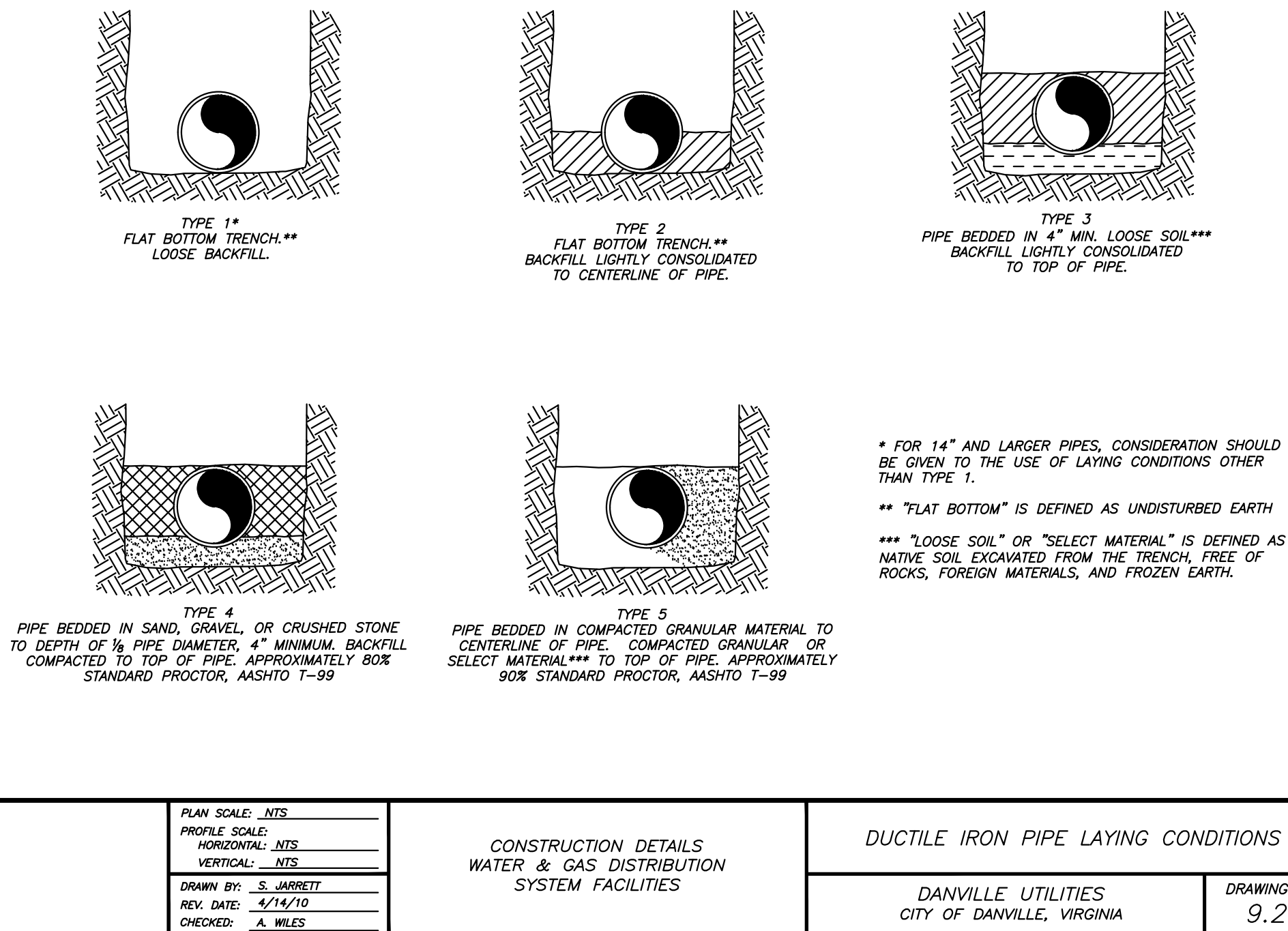
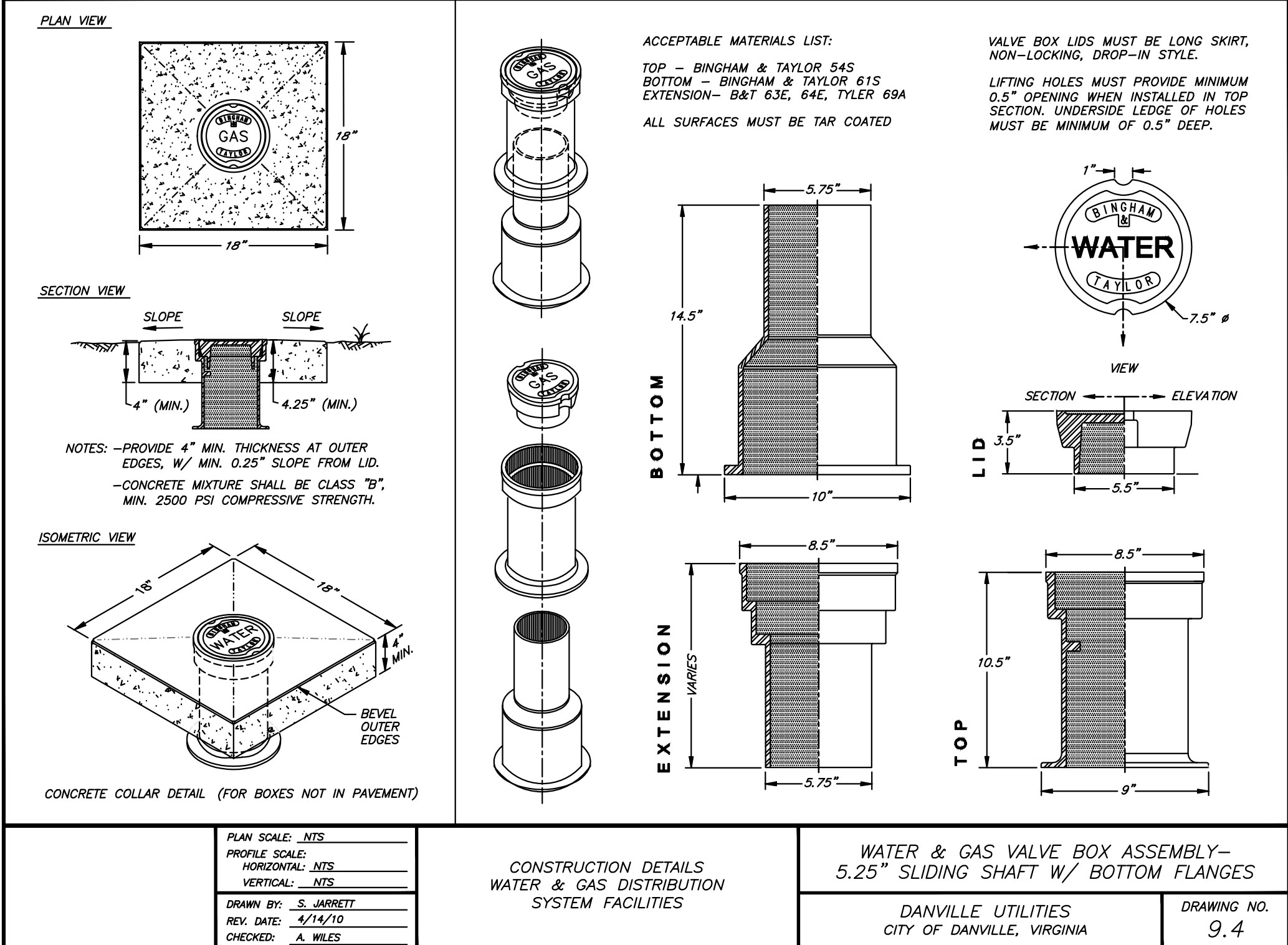
SHEET INDEX

1. COVER SHEET
2. UTILITIES PLAN
3. SELECTED DETAILS
4. SELECTED DETAILS (CONT.)





COMMON TRENCH UTILITY INSTALLATION
N.T.S.



CONSTRUCTION DETAILS
WATER & GAS DISTRIBUTION
SYSTEM FACILITIES

TYPICAL WATER & GAS POLYETHYLENE
LATERAL CONNECTION INSTALLATION

DANVILLE UTILITIES
CITY OF DANVILLE, VIRGINIA

DRAWING NO.
9.7

CONSTRUCTION DETAILS
WATER & GAS DISTRIBUTION
SYSTEM FACILITIES

TYPICAL WATER VALVE & BOX INSTALLATION

DANVILLE UTILITIES
CITY OF DANVILLE, VIRGINIA

DRAWING NO.
9.15

CONSTRUCTION DETAILS
WATER & GAS DISTRIBUTION
SYSTEM FACILITIES

TYPICAL THRUST BLOCK DETAILS

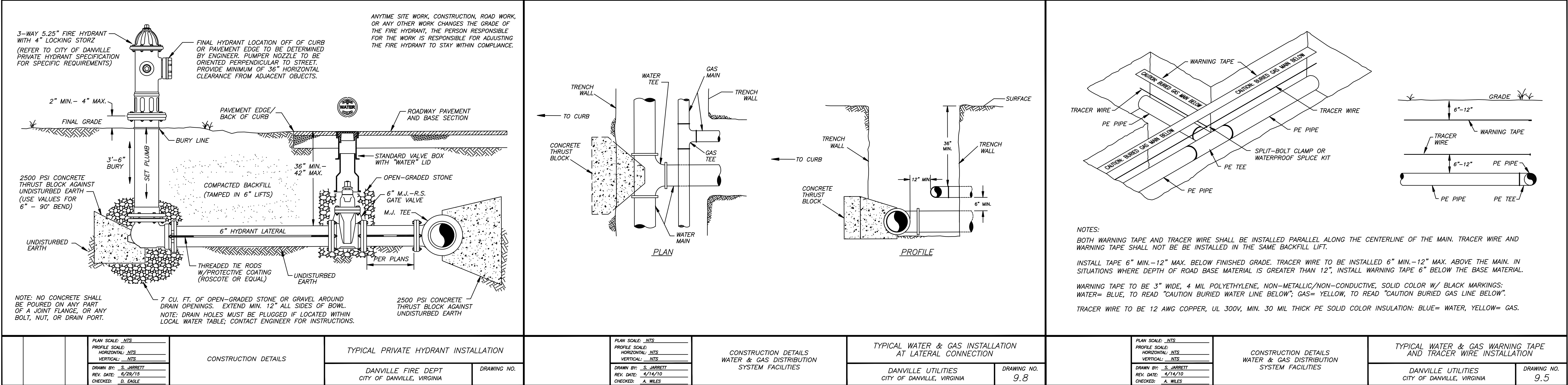
DANVILLE UTILITIES
CITY OF DANVILLE, VIRGINIA

DRAWING NO.
9.16



REVISIONS	BY	APPR	DATE

PLANS	BY	DATE
DESIGNED	CPF	07/21/16
DRAWN	CPF	
CHECKED		
THE CITY OF DANVILLE, VIRGINIA OFFICE OF THE CITY ENGINEER 427 PATTON STREET DANVILLE, VA 24541 434-799-5019		



REVISIONS	BY	APPR	DATE

SCALE: PLAN: NONE HOR: NONE VERT: NONE
CITY IFB:
CITY FILE #: H-888A VDOT UPC: N/A
SHEET 04 OF 04 SHEETS